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ABSTRACT

Since sports can sometimes lend themselves to eating disorders, coaches and sports administrators must get involved in the detection and treatment of this problem. While no reliable studies or statistics exist on the incidence of anorexia nervosa and/or bulimia among athletes, some research suggests that such disorders occur frequently among children and young adults in activities like gymnastics, figure skating, middle and long distance running, swimming and diving, rowing, and wrestling. One study demonstrated that the sport itself can be a factor in either precipitating or preventing pathogenic weight control. Sports which emphasize endurance, aesthetics, and weight levels featured the highest number of athletes at risk for developing an eating disorder. A recent survey by the National Collegiate Athletic Association (NCAA) revealed that eating disorders have become a significant health problem among college athletes, with 93 percent of the reported problems involving women's sports. Another predicament arises from the medical community's constant warnings against over eating while doctors virtually ignore the health risks presented by underweight individuals. The study examines the treatment problems commonly encountered with athletes and argues for more stringent guidelines in the sports community so as to monitor and assist those at risk for developing eating disorders. Contains 19 references. (RJM)

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# Eating Disorders and Sports

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Health professionals should be concerned about the role sport plays in eating disorders, since anorexia nervosa and bulimia are health and life threatening illnesses. Similarly, coaches, technical and executive directors and other sport administrators should be concerned about eating disorders, since they are often described as 'a diet and fitness program gone wild.' Eating disordered athletes start a diet like anyone else, but for some unknown reason, the eating disordered individual is driven to further weight loss, even to the point of emaciation. Similarly, what starts out as a healthy sports program ends up in frenzied, compulsive exercise which dominates the person's life. The diet and sports program which started as the solution to stress problems of life, in turn becomes the problem, as it results in pathogenic behaviour. 'Anorexia Athletica' (A. Thuker, 1987) and 'Cosmetic Sport Ranging from Starvation to Steroids' (Moriarty & Moriarty, 1991) are the legacy.

Bulimia consists of recurring episodes of binge eating, in which the person feels unable to stop eating voluntarily, followed by a variety of weight control methods, such as self-induced vomiting, fasting, consuming diuretics and purging with laxatives or exercise. Anorexia nervosa is an emotional disorder characterized by an intense fear of normal weight, lack of self esteem and distorted body image, which results in self-induced starvation.

Eating disorders have one of the highest fatality rates for any mental illness. Brumberg (1988) records a rate of 5-15% of hospitalized anorexics and L.K.G. Hsu (1990) gives a death rate of up to 19% for bulimia. However, if detected and treated, more than 70% of people with eating disorders recover.

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No reliable research studies or statistics exist on the incidence of eating disorders among athletes. Estimates suggest that 15-20% of the general female high school population, and even a higher percentage of college and university female populations, are involved in some form of eating disorder. Research studies suggest that the incidence is much higher among children and young adults involved in activities such as gymnastics, figure skating, middle and long distance running, swimming and diving, rowing and wrestling.

National Collegiate Athletic Association (NCAA) Survey

While drugs and alcohol abuse get most of the headlines in sport at the institutional level in North America, a recent survey by the NCAA sports-science division reveals that eating disorders quietly have become a significant health problem among college student athletes (Dick, 1990).

Sixty-four percent of NCAA member institutions responding to a survey reported that at least one student-athlete had experienced an eating disorder during the past two years. The vast majority of the reports (93 percent) were in women's sports.

Women's gymnastics was the sport with the largest percentage of responding schools reporting an eating disorder (48%). The next highest percentages were in women's cross country (23%); women's swimming and track (21% each). Basketball, soccer, field hockey, volleyball and lacrosse were all 10% or more. Skiing, tennis, golf, diving, track and field events ranged from 8% to 2%, respectively.

Wrestling was the men's sport with the greatest percentage of sponsoring schools reporting an eating disorder (7%). Men's cross country (3%) was second, followed by gymnastics and track (2%), and swimming and football (1%).

Randall W. Dick, NCAA Assistant Director of Sports Sciences, has pointed out that:

> The higher prevalence of eating disorders in female as opposed to male sports is similar to reports of eating disorders in other populations; however, it also is important to note that eating disorders are not completely limited to females. (Dick, 1990:1)

In addition, although some sports may have higher risk of athletes with eating disorders, this survey shows that eating disorders were reported in a wide range of activities. Because an eating disorder is a complex problem often hidden by those suffering from it, no sport should be considered 'exempt' from the problem. (Ibid.)

Weight Dependent, Endurance and Aesthetic Sports and Eating Disorders

An interesting study by Jorgun Sundgot-Borgen on "Pathogenic Weight Control and Eating Disorders Among Female Athletes," presented at the University of Windsor (1990) demonstrates that sports can be a factor in either precipitating or preventing an eating disorder - depending upon the nature of the sport. This study investigated the incidence of eating disorders with the athletic groups subdivided on the nature of the sport. Six categories were utilized for sports groups: 1) technical, including things such as long and high jumps, sailing and golf; 2) endurance, such as middle and long distance running, rowing, swimming, cross country skiing and speed skating; 3) aesthetics, such as dance, gymnastics, figure skating and diving; 4) weight dependent, such as wrestling, judo and karate; 5) ball games, such as basketball, volleyball, tennis and badminton and 6) power, such as powerlifting, shot put and discus.

Results showed that 32% of the athletes were dieting, and further that 34% of the dieting athletes used pathogenic weight control methods. Twenty-three percent of the athletes were classified as risk subjects for development of an eating disorder. The highest frequency of athletes using pathogenic weight control methods and athletes defined at risk were found in endurance, aesthetic, and weight dependent sports.

In many sports (gymnastics, figure skating, distance running and cross country skiing), low weights are considered necessary for optimal appearance and performance by many coaches and judges. Allegedly, it was a judge's comment to gymnast Christy Henrich indicating "she had to watch her weight" which triggered her frenzied dieting and the eating disorders which ultimately claimed her life on July 26, 1994. Some sports impose specific weight limits for competition (wrestling, rowing and horseracing). In sports such as gymnastics, figure skating and diving the gaunt emaciated look is misconstrued as aesthetic appeal. However, as pointed out by Rosen (1991) in response to a BANA survey:

> Many athletes who engage in drastic weight control do so under the assumption that weight reduction will improve performance. It is important for the athlete (and their coaches) to have a realistic idea of the impact of weight and diet on performance. Moreover, it needs to be clarified that the presence of an eating disorder almost certainly interferes with performance as an athlete. Although there are some notable instances in which athletes have been quite successful while suffering from an eating disorder, these are the exceptions. The metabolic consequences of symptoms such as vomiting and laxative abuse undoubtedly have a negative effect on performance and can be fatal.
>
> (Garner & Rosen, 1991)(brackets added)

Another significant factor which has exacerbated this emphasis on thinness has resulted from the bias of the medical and health profession community towards emphasizing the risk of overweight, while at the same time virtually ignoring health risks presented by underweight. Being underweight is an equal or worse health hazard than being overweight (Garner, 1984). While this is true in general, it is doubly true for children and youth. As pointed out by Mallick (1983):

> Increased health risk is an assumed consequence of obesity, but this has been documented primarily in adult men. There is very little evidence of greater morbidity in obese children, and an association may not exist at all.
>
> (Quoted in Clark, Parr and Castelli, 1988: 18)

This is in contrast to underweight (anorexia nervosa and bulimia) which is reputed to have the highest mortality rate of any psychosomatic illness in the low risk children and adolescent age group.

> In our zeal to be healthier, more fit persons, we should not reinforce the exaggerated media focus on slimness in our society, which is intolerable of overweight. Rather, there needs to be support for a broader acceptance of body size and shape, especially concerning the vulnerable child.
> (Mallick quoted in Clark et al., 1988: 19)

## Referral and Treatment of Athletes with Eating Disorders

There has been a considerable amount of quality research conducted and published on the incidence and detection of eating disorders among athletes, but limited published literature on eating disorders and sport from the perspective of health professionals. To rectify this shortcoming, BANA sent an opinionnaire on this topic to approximately three dozen treatment therapists and university health centres. Responses were received from Australia, the UK, Norway, seven states in the United States and four provinces in Canada. Results are published elsewhere (NAAS, 1992). Emphasis here will be on only the questions which relate to problems with sport and the sport establishment, and the role of coaches and administrators.

The most frequently cited problems with sport clients were:

1. denial of a problem,
2. pressure from coaches/trainers to lose weight and excessively rely upon weight loss to improve performance,
3. excessive exercise and guilt among athletes when not overtraining, even in the face of stress fractures and emaciation,
4. culturally endorsed abnormal behaviour in the sport world such as counselling for starvation and steroids,
5. misconceptions and myths regarding food, weight and performance (counselling for vegetarian diets),
6. seeking short term performance at the cost of long-term health.

The most frequently cited problems with the sport establishment were:

1. ignorance of dieting dangers,
2. counselling of athletes regarding the danger of being thin versus fit,
3. denial of the problem of eating disorders and failure to evaluate health loss for competitive gain,
4. lack of prevention programs,
5. reticence to refer eating disordered individuals for treatment because of fear on the part of coaches and trainers that their authority would be usurped,
6. however, agencies cooperated once informed and convinced of the problem.

Health professionals in this survey maintained that coaches and administrators:

1. have been part of the problem, but could be part of the solution,
2. often precipitate and perpetuate eating disorders,
3. should decrease the emphasis on body weight and increase awareness of the risk of dieting and being underweight, e.g., osteoporosis, menstrual problems, deterioration of teeth, nails, hair, skin, and in severe cases, electrolyte imbalance and death,
4. should provide nutritional guidance, discourage dieting and encourage a balance in school, sports and social life,
5. educate themselves on the signs, symptoms and characteristics of eating disorders, identify those at risk, refer them for treatment, and cooperate in the treatment program,
6. coaches, sport administrators, trainers and nutritionists should run preventive programs, since prevention is the best form of treatment.

On the question of continued athletic activity during treatment, opinions ranged from no activity in the acute stage to restricted activity during recovery. Most favoured moderate, supervised practice, but avoidance of competition. There should be a balance in nutrition, rest and activity during recovery. The health professional and sport personnel should moderate and monitor so that organized sport is not replaced by the athlete with personal addictive exercise. Most therapists like to involve the coach, trainer and nutritionist to enhance the athlete's desire to achieve improved health. The value of moderation in lifestyle and the long-term negative effects on health and performance resulting from maladaptive behaviour and malnourishment should be stressed.

The results of this survey provided the grounds for both pessimism and optimism regarding the future of eating disorders among sport participants. Pessimism stemmed from

the response of one prominent medical authority, chef de mission of an Olympic team, and chairman of a national sports medicine council (of a country which will remain unnamed), whose terse one paragraph response stated, "I have no particular recent experience in treating individuals with eating disorders." Would he have responded similarly to an opinionnaire on the male sport problem of steroids? We think not, particularly in a country such as Canada, where we spent more money on the Dubin Commission than the total cost of sending the Canadian contingent to the Seoul Olympics. Regrettably no similar efforts have been made in the eating disorder area, a medical problem with more chronicity and a higher mortality rate than that attributed to performance enhancing drugs.

Optimism was in order, however, as eating disorders are 'brought out of the closet' by the Canadian Sports Medical Council and as more coaches and administrators include A Preventive Curriculum for Anorexia Nervosa and Bulimia (1984) in their program. Researchers in the sport, athletic and health professional area have turned out a number of excellent publications which will assist those involved with athletes with detection, referral and treatment, some of which are listed in the references. There are a number of model programs which provide an example of comprehensive assessment, referral and treatment and address the physiological, psychological, social and cultural issues which precipitate and perpetuate eating disorders in the predisposed athlete (Ryan, 1989). Coaches and trainers, sport administrators and judges are in an excellent position to prevent, to identify and to refer for treatment those with eating disorders. Nutritionists, trainers and team physicians are in an excellent position to assist in treatment and conduct preventive programs.

Currently a U.S. task force, with which I am associated, is developing a program to deal with eating disorders in sports through the use of an education and information policy

applied to athletes and coaches, and contingency and sanction policies applied to athletic institutions in the institutional infrastructure (Black and Clary, in press). Components include:

1. Information and education for athletes stressing the value of proper nutrition and moderate lifestyle and the detrimental health effects of maladaptive behaviour and malnourishment. A nutritional diet would be a prerequisite to participation in sport.

2. Coaches, trainers and athletic administrators who advocate proper nutrition and health training, along with athletes who participate in these programs, would be recognized and rewarded.

3. There would be noncompliance penalties for sport organizations who fail to adhere to the nutritional guidelines and standards, or who encourage and condone unhealthy nutrition or exercise habits (similar to penalties for violation of drug use). These violators would be placed on probation.

4. Promotion of products and sports which advocate a healthy body image would be encouraged and sponsors in sports who portray the thin image versus the healthy image would be disallowed.

Just as we have an Occupational Health and Safety Act, we need a Sport Health and Safety Act to protect participants from themselves and to guide and hold accountable the sport establishment for the management of sport programs. The law prohibits child labour and we need laws to prohibit children from participation in child sport labour and prepubescent competition. At the turn of the century Canada passed laws prohibiting child labour in coal mines and preventing the practice of starving children to keep them small and prepubescent so they could work in the mines for six to eight hours. The sport of gymnastics needs similar legislation.

## Summary

Sport has been part of the problem but can be part of the solution in dealing with eating disorders. You can help by:

1. knowing the signs, symptoms and characteristics of eating disorders, identifying the problem and referring individuals with eating disorders for professional treatment;

2. implementing prevention programs which advocate moderation in sport as well as school and social life;

3. marketing and implementing active living and weight management rather than weight reduction, stressing that being underweight is at least equally hazardous to your health as being overweight;

4. advocating sport and/or public policy legislation which assures health and safety for children and youth involved in sport; and

5. rewarding sport agencies which promote healthy living and sensible body image expectations and sanctioning elite sport organizations and representatives who precipitate and perpetuate unhealthy maladaptive behaviour such as starvation and steroids.

Pressures have increased in modern sport society as we have passed from the Greek ideal of sport, "mens sano, corporo sano" - "a sound mind in a sound body" - to current "flash and trash" fitness and better teams through starvation and steroids. Health professionals, sport coaches, instructors and administrators should work against the following sport culture influences:

1. The 'Thinning edge' of judges and coaches,
2. Sport induced and perpetuated prepubescent female athletes,
3. Harassed 'Golden Girls' in a paternalistic sport world,
4. Sports Illustrated and Vogue fitness marketing, and
5. Anorexia Athletica and Bulimic Fitness

References

Black, D.H. (Ed.). (1991). Eating disorders among athletes: theory, issues and research. Reston, VA: American Alliance for Health, Physical Education, Recreation and Dance.

Black, David R. and Jane M. Clary. (In press) Eating disorders among athletes: public policy to promote social and individual behavioral change, in C.O. Dobson & L.H. Humphrey (Eds.). Exercise Physiology: Current Selected Research, 5 AMS.

Borgen, Jorunn Sundgot. (Oct., 1991). Pathogenic weight control behaviour and self-reported eating disorders in Norwegian female elite athletes. Presentation and Paper at the University of Windsor, Faculty of Human Kinetics.

Brumberg, Joan Jacobs. (1988). Fasting Girls: The Emergence of Anorexia Nervosa as a Modern Disease. Cambridge, MA: Harvard University Press.

Cahper (July/August, 1986). Special issue: eating disorders. Canadian Association for Health, Physical Education and Recreation Journal.

Carney, Barbara and translated intoFrech by Marie Veilleux. (1986). A Preventive Curriculum for Anorexia and Bulimia. Windsor, ON: Bulimia adn Anorexia Nervosa Association (BANA-Can/Am).

Clark, K.L., Parr, R.B. and Castelli, W.P. (1988). Evaluation and Management of Eating Disorders and Obesity. Champaign, IL: Life Enhancement Press of Human Kinetics Press.

Dick, Randall W. (September 17, 1990). NCAA Eating Disorder Survey. NCAA News.

Garner, D.M. (1984). Research on eating disorders and sport/fitness participation. Proceedings, Ottawa Cahper, Ottawa, Ontario, Canada. (Presentation available on audio tape.)

Hsu, L.K. George. (1990). Eating Disorders. New York: The Guildford Press.

International Athletic Foundation. (1988). Too Thin to Win? An Informational Booklet on Eating Disorders. Monaco: IAF.

Moriarty, Dick. (1991). Athletes who 'lose' more than they win, and Strategies for prevention intervention, (with other authors) in Chappell-Holliman, Susan (Ed.) Handbook for Coaches on Eating Disorders and Athletes. Dubuque, IA: Kendall Hunt Publishing Company.

NAAS. (Oct.-Dec., 1992). Eating Disorders and Athletics. National Anorexic Aid Society Newsletter, 15 (4): 1-10.

National Collegiate Athletic Association (NCAA), (1991). Nutrition and Eating Disorders in College Athletics. Overland Park, KS: NCAA.

Rosen L. (1991). Personal correspondence quoting Garner, D. & Rosen, L. (1991). Eating disorders among athletes: research and recommendation. Journal of Applied Sport Research, 5 (2), 00-00 (in press).

Ryan, Randa. (1991). Management of eating disorders in athletic settings, in Brownell, Kelly D., Judith Rodin and Jack H. Wilmore. Eating, Body Weight and Performance in Athletics: Disorders of Modern Society. Philadelphia, PA: Lea & Febiger.

Thompson, R. and Trattner-Sherman, R. (1993). Helping Athletes with Eating Disorders. Windsor, ON: Human Kinetics Press.

Audiovisual Resources:

Sport Medicine Council of Canada. (November, 1990). "Desperate Measures: Eating Disorders in Athletics." VICOM: Vancouver 1-800-661-6552.

NCAA. (1990). Nutrition and Eating Disorders
"Afraid to Eat: Eating Disorders and the Student Athlete."
"Out of Balance: Nutrition and Weight."
"Eating Disorders: What Can You Do?"
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